

**May 2010 –
Current**

Dimensional Control Systems contract to Chrysler Group LLC – Dimensional Engineer:

Developed Microsoft Access database as a front end database to the Chrysler CMDANA database to pull all the CMM Data and Vision Data for generating the monthly corporate reports for the BIW Control plans and the Engineering build objectives. This allowed me to take over the corporate reporting and 3 other employees to move into different positions.

Developed control plans and processed template requests to have new templates created in Chryslers ECMM. Developed the Change Management system and process for the Chrysler control plan group. Developed the disposition request workbook used by all Chrysler's NAFTA plants to request tolerance changes. Manage all disposition requests and coordinate the required updates to the E-CMM templates and to the Corporate Scoring database.

Developed RSS workbook used by the Fiat Chrysler Interiors group and the Tier 1 interior trim suppliers. Developed macros to allow the user to build a single workbook with a summary worksheet showing the results of all of their RSS Stack studies.

Developed Microsoft Excel application to compare CMM data from the CMDANA database where the plants upload the CMM Data to the CMM Points as they were developed in NX. The application generates several worksheets showing differences in tolerances, nominal values, and also identifies points that are appear to the same feature with a different name.

Developed a Microsoft Excel Add-in application that reads a master workbook or a tolerance change request and uses the PC-DMIS type library to loop through the features in PC-DMIS and update any tolerances that do not match. A report is generated showing all the features that were updated or not found in the PC-DMIS program.

Developed an excel application that parses a folder structure and finds all the files of a specific type, reads them into memory, and generates a matrix showing all the filenames as columns and the features in the left most column. The table is populated with "X" to indicate the feature is in the file. This is used to identify where certain features are checked in the array of components, subassemblies, and assemblies.

**June 2009 –
February 2010**

Prestige Engineering Resources contract to IACNA – Dimensional Engineer:

2011 RT Door Trim – Developed and proposed initial Datum Schemes. Created GD&T Drawings in CATIA V5. Completed RSS Studies for all Chrysler Build Objectives.

2010 PM49 IP & Console – Reviewed dimensional data, marked up drawings for dimensional PPAP. Coordinated drawing updates with design group in Pune, India. Gave feedback to engineering team on dimensional data.

**July 2007 – January
2009**

Prestige Engineering Resources contract to IACNA – Dimensional Engineer:

2009 RM Door Trim – Updated existing GD&T in CATIA V4 and supported Engineering and Manufacturing through PPAP. Reviewed Data, marked up GD&T and reviewed with Chrysler for Dimensional PPAP Approval.

2009 MK49 Console – Completed RSS Studies for customer driven objectives. Created GD&T for all of the components and the end item assemblies in CATIA V5. Created Measurement Points in CATIA.

2009 MK49 Door Trim – Completed RSS Studies for customer driven objectives. Created GD&T for all of the components and the end item assemblies in CATIA V5.

Projects

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February 2006 – May 2010

DeVries & DeVries Software Solutions, LLC (Dissolved May 2010) – Chief Executive Manager:

Data Importer – Collaborated on the development of software to read cmm data from several CMM formats including PC-DMIS, Datapage, Virtual DMIS, Tarus Spud, CAPPs, LK CAMIO, Tutor, Metrolog (English & Spanish), Polyworks, and Easy DMIS. The software would compile a report in Microsoft Excel with all the calculated statistics necessary for a thorough capability analysis.

CMM Converter – Collaborated on the development of software to read a csv file generated from macros in Catia V5 or a Datalog file generated from Catia V4 and generate several other CMM software friendly formats. The CMM formats generated included a Standard DMIS file, a PC-DMIS flavored DMIS file, an XYZ format file, a format read by Tarus Spud, a Polyworks format, and the Catia V4 Datalog format. The CMM Converter was capable of running in server mode where it could be setup to monitor a folder for input files. When a file was added to the folder the software would automatically convert the file and place the converted files in an output folder. CMM Converter could output files into a single zip archive file to make it simple for the dimensional engineer to e-mail all the formats to the measurement source. The CMM Converter would also read a DMIS file and compare the point coordinates with a csv file and generate a new DMIS file with the nominal values and vectors updated with the new values and generate a report showing the points that were modified.

September 2001- July 2007

EDS / Avatar contract to Collins & Aikman and Direct - Senior Dimensional Engineer:

2008 LX & LC23 IP – Responsible for dimensional management on Daimler Chrysler LX and LC23 IP programs. Created initial GD&T markups using DMU Software and Microsoft Powerpoint. Coordinated data transfers to India Design Center to create drawings in CATIA.

GMT966 Cockpit Assembly – Responsible for overseeing dimensional management issues pertaining to tier 2 suppliers and other partitions. Also assist in the dimensional management responsibilities of internal components.

GMX381 Door Trim – Created drawings in UG to GM drawing standards. Developed RSS studies to determine tolerance values necessary to meet GM DTS. Reviewed fixture designs and builds. Created CMM measurement point drawings. Reviewed CMM data and reported back to product engineering team.

GMT001 Door & Liftgate Trim – Created GM Drawings, RSS Studies, CMM Point Drawings. Coordinated fixture design and reviews.

May 2001- September 2001

EDS contract to Ford Motor Company – Dimensional Engineer:

Added I/P Assy, Console Assy, Valance Panels, CD/DJ Module, Door Trim, and A-Pillar Trim into existing visVSA model of U228 BIW. Investigated Fit and Finish between I/P and Console, I/P and A-Pillar Trim, I/P and Valance Panels, Console and Valance Panels, Valance Panel and CD/DJ Module, and I/P and Door Trim. Reviewed results with Lear, Visteon, and Ford. Investigated 2 different locating schemes for the A-Pillar Trim and 3 different locating schemes for the Console Assembly.

April 2001- May 2001

EDS contract to DOW Automotive – Dimensional Engineer:

Created model to analyze clearance between Windshield Wiper Module and Dash Insulator Pad on DEW98 utilizing previously created Vis-VSA model. Reviewed With DOW representatives to determine objectives of study and to determine tolerances to be applied to critical features. Reviewed results with DOW Automotive and Ford representatives.

January 2001- April 2001

EDS contract to Troy Design & Manufacturing – Dimensional Engineer:

Created variation model of DEW98 Underbody using Vis-VSA software.

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**September 2000-
December 2000**

EDS contract to Becker Group – Dimensional Engineer:

Dimensional Management Engineer responsible for dimensional management on the following programs:

General Motors: GMX 367 Overhead System, Door Trim, Garnish, and I/P.

Daimler-Chrysler: 2004 WK Hard-trim, Viper – Cowl.

Ford: DEW98 Door Trim, Overhead System, and Console

Created MS Access Database to track all drawings, fixtures, and open issues for all programs. Developed RSS stack spreadsheet for use on 2004 WK Program. Attended meetings to represent Becker Group International's interest in the development of GD&T datum schemes. Attended design and build reviews of CMM fixtures. Represented Becker Group International at Gage Repeatability and Reproducibility studies. Updated GD&T drawings in CATIA. Participated on committee to update Daimler-Chrysler GD model standards to reflect the most current and agreed upon practices.

**September 1999-
September 2000**

EDS contract to Lear – Dimensional Management Engineer:

Documentation of GD&T of seat frame components in UG using the GM Toolkit. Developed VSA-3D models of seat frame assemblies to trouble shoot and root cause issues with the latching mechanism for the seats. Developed a VSA-3D model for an Air Diverter valve that calculated a torque factor to predict the torque input required at the motor that activated two valves in the system using a pair of cams.

**August 1998-
September 1999**

EDS contract to United Technologies Automotive - Dimensional Engineer:

GM Delta Cockpit Assembly – Lead engineer for the GM Delta Cockpit Assembly program. Managed two VSA 3D modelers and one detailer. Attended all meetings representing UTA dimensional management. Reviewed GD&T with GM dimensional management engineer and UTA product engineers.

**August 1996-
August 1998**

EDS contract to Textron Automotive - Dimensional Management Lead Engineer:

Chrysler Jeep Grand Cherokee I/P – Lead engineer for the dimensional management team on the 1999 WJ I/P, Console, and Hardtrim. Responsible for managing dimensional management activities of the three projects including the creation of the GD&T per the Chrysler standard format in CATIA. Modeled I/P Assembly with VSA-3D tolerance analysis software. Also created and documented measurement points to verify part compliance to the GD&T tolerance specifications. Reviewed CMM gages to ensure compliance to the GD&T. Reviewed CMM data to root cause build issues and identify components not complying to tolerance specifications.

**April 1996 -
July 1996**

EDS contract to Hewlett Packard, Disk Memory Division – Dimensional Engineer:

Developed a system level VSA-3D model based on current prints of new hard drive. The model included calculations of the net unbalance of the disk pack assembly if assembled using methods from the previously released hard drive, as well as several new approaches to improve the disk unbalance. Disk mapping calculations also predicted the resulting effective diametrical zones of the different areas of the disks.

March 1996

EDS contract to McDonnell Douglas Corporation – Dimensional Engineer:

Developed VSA-3D model of C-17 Radome, Radome Hinge, and Bulkhead. Created model based on blue prints of the components. Created iterative routine to open the radome and track the relationship of the radome to the bulkhead. This revealed interference by design between the radome and the bulkhead trim edge. The model was then modified to represent a proposed design change to the radome. The model proved the design change to be effective in relieving the interference between the radome and the bulkhead.

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**January 1995-
February 1996**

EDS contract to Textron Automotive – Dimensional Engineer:

1997 TJ I/P & Console (1997 Jeep Wrangler) – Took responsibility of updating existing VSA-3D model of the Instrument Panel developed by a colleague and the model of the Console developed in a previous contract. Responsibilities included: Verifying the fixture builds against the GD&T for the components of the I/P and the Consoles as well as the fixtures for the assemblies, arranging for the fixtures to be certified by Chrysler, Developing inspection points for the components and assemblies, arranging for parts to be inspected by an independent inspection company, analyzing data from part inspections and advising project engineers on out of tolerance areas in a timely manner to allow for tooling tuning prior to production.

**September 1994-
December 1995**

EDS contract to Textron Automotive – Dimensional Engineer:

1997 ZG I/P (1997 Jeep Grand Cherokee RHD) – Developed VSA-3D model based on LHD GD&T. Oversaw the entry of the RHD GD&T into CATIA, reviewed GD&T for LHD & RHD and made corrections.

**March 1994-
August 1994**

EDS contract to Textron Automotive – Dimensional Engineer:

1997 TJ Console (1997 Jeep Wrangler) – Modeled center storage console and components as assembled in BIW for Textron design team using PC based VSA-3D software. Established functional Datum schemes and tolerances to achieve customer-based objectives.